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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,765	01/24/2006	Rudolf Gheczy	03872-0033US1	5520

23973 7590 07/20/2010
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EXAMINER

WU, IVES J

ART UNIT	PAPER NUMBER
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1797

NOTIFICATION DATE	DELIVERY MODE
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07/20/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBRIPDocket@dbi.com
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Office Action Summary

Application No.

10/565,765

Applicant(s)

GHECZY ET AL.

Examiner

IVES WU

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

- (1). Applicants' Remarks filed on 5/14/2010 has been received.
Claims 1-11 were cancelled before.
The rejections of claims 12-25 in prior Office Action dated 12/14/2009 is sustained.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- (2). **Claims 12-20, 22, 24-25** are rejected under 35 U.S.C. 102(a) as being anticipated by Brennecke et al (US 6579343B2), evidenced by Erickson (US 4132766), Sweeney et al (US 5856533A) for the same rationale recited in prior Office Action dated 12/14/2009.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- (3). **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Brennecke et al (US 6579343B2), further in view of Ramprasad et al (EP 583748A1) and Voorhees (US 2196281).
- (4). **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Brennecke et al (US 6579343B2), in view of Horn et al (US 6682794B1).

ALTERNATIVELY, CLAIMS 12-25 ARE REJECTED IN THE FOLLOWING:

- (5). **Claims 12-20, 22, 24-25** rejected under 35 U.S.C. 103(a) as being unpatentable over Cassano (US 4529775), in view of Brennecke et al (US 6579343B2), evidenced by Erickson (US 4132766) for the same rationale recited in prior Office Action dated 12/14/2009.
- (6). **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Cassano (US 4526775), in view of Brennecke et al (US 6579343B2), further in view of Ramprasad et al (EP

583748A1) and Voorhees (US 2196281) for the same rationale recited in prior Office Action dated 12/14/2009.

(7). **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Cassano (US 4526775), in view of Brennecke et al (US 6579343B2), further in view of Horn et al (US 6682794B1) for the same rationale recited in prior Office Action dated 12/14/2009.

Response to Arguments

(8). Applicant's arguments filed on 5/14/2010 have been fully considered but they are not persuasive. Applicants point out while Col. 3, line 49-50 of prior art Brennecke et al (US 6579343B2) mentions a general applicability of the method for oxygen removing purposes, further passages pertaining to oxygen absorption, i.e., Examples 2,3 and 6 clearly show that the ionic liquids used by Brennecke et al. are not suitable for selectively absorbing oxygen from gaseous mixtures, as the solubility of oxygen therein is very low., the oxygen concentration is almost undetectable (cf. Table II in Col. 13) (§4, page 2, Remarks); While Brennecke et al. generally mentions the possibility of using ionic liquids for separating oxygen from other gaseous compounds, he does not teach any specific ionic liquids suitable for this purpose. On the contrary, as mentioned above, Brennecke et al. explicitly discloses ionic liquids showing very poor oxygen-uptake capacities, so that the Brennecke et al actually teaching away from the present invention (§2, page 5, Remarks).

However, in Examples of Brennecke et al (US 6579343B2) is used for carbon dioxide absorption by the ionic liquid [bmin][PF₆] as shown in Figure 8, Table II, Brennecke et al (US 6579343B2) also disclose broad range of ionic liquids, anions such as nitrate, tetrafluoroborate (col. 7 – col. 9) which are also anion species for oxygen absorption listed in Applicants' Specification. Cations such as imidazolium salts, pyridinium salts which also are cation species for oxygen absorption listed in Applicants' Specification. Therefore, the broad disclosure of Brennecke et al (US 6579343B2) still read on the limitations of instant claims. "Disclosed examples and preferred embodiments do not constitute a teaching away from a broad disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IVES WU whose telephone number is (571)272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu

Art Unit: 1797

Date: July 6, 2010

/Duane Smith/

Supervisory Patent Examiner, Art Unit 1797